

**Department of Energy**

**Ohio Field Office  
Fernald Closure Project  
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Springdale, Ohio 45246  
(513) 648-3155  
MAY 27 2005**



Mr. James A. Saric, Remedial Project Manager  
United States Environmental Protection Agency  
Region V-SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0258-05

Mr. Thomas Schneider, Project Manager  
Ohio Environmental Protection Agency  
Southwest District Office  
401 East Fifth Street  
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

**FINAL FACT SHEET FOR DELETION OF THE COMPREHENSIVE SITEWIDE  
OPERABLE UNIT 6 (OU6) REQUIREMENTS FROM AMENDED CONSENT  
AGREEMENT (ACA)**

Since 1996, the Department of Energy, Fernald Closure Project (DOE-FCP) and the United States Environmental Protection Agency (USEPA) have had discussions related to the deletion of the OU6 requirements from the ACA. In order to complete this action, USEPA requested DOE-FCP to develop a Fact Sheet related to this topic. DOE-FCP created the fact sheet, presented the fact sheet during various public meetings and held a 30-day public comment period.

Attached is the Final Fact Sheet, response to comment received from Ohio Environmental Protection Agency (OEPA) and response to comments received from the Fernald Citizen Advisory Board (FCAB).

In the near future, pursuant to the Fact Sheet and per Section XXXIII of the ACA, modifications and change pages to the ACA will be submitted to the USEPA to formalize the elimination of OU6.

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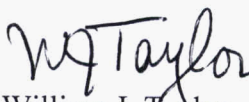
Mr. James A. Saric  
Mr. Tom Schneider

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DOE-0258-05

If you have any questions or require additional information, please contact Johnny Reising at (513) 648-3139.

Sincerely,

  
William J. Taylor  
Director

FCP:Reising

Enclosure: As Stated

cc w/enclosure:

J. Reising, OH/FCP

G. Stegner, DOE/OH

T. Schneider, OEPA-Dayton (three copies of enclosure)

G. Jablonowski, USEPA-V, SR-6J

M. Cullerton, Tetra Tech

M. Shupe, HSI GeoTrans

AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:

K. Alkema, Fluor Fernald, Inc./MS01

F. Johnston, Fluor Fernald, Inc./MS99

C. Murphy, Fluor Fernald, Inc./MS77

ECDC, Fluor Fernald, Inc./MS52-7







# FERNALD

## Closure Project

### FACT SHEET

## Decision by DOE and U.S. EPA to Formally Remove the Comprehensive Sitewide Operable Unit (Operable Unit 6) from the Amended Consent Agreement

### DECISION SUMMARY

- In October 1996, U.S. EPA concurred with DOE's request to eliminate Operable Unit 6 and the associated studies and documentation requirements from the September 1991 Amended Consent Agreement. DOE's request and U.S. EPA's concurrence centered primarily on *four* facts:

1. At the time of signing the Amended Consent Agreement in 1991, the final remedy for each of the five Operable Units was not known, and leaving waste material in-situ was an option being considered. None of the five remedies eventually approved, selected an in-situ option.
2. All contaminated debris and soils above established Final Remediation Levels remaining on site would be placed in the On-Site Disposal Facility (OSDF).
3. Section XI (D) of the Amended Consent Agreement requires a site-wide residual risk assessment be submitted to U.S. EPA following completion of the response actions, offering assurances that residual risk following completion of the site-wide remedy remained protective of human health and the environment. This is required regardless whether Operable Unit 6 exists or not.
4. The Amended Consent Agreement required the submission of Operable Unit 6 documents to be triggered by the approval of the Operable Unit 3 Record of Decision whereby these documents would be submitted within six months of Operable Unit 3 Record of Decision approval. However, both DOE and U.S. EPA acknowledged that no additional risk information would be obtained six months after approval of the Operable Unit 3 Record of Decision and that additional information regarding residual risk assessment would not be available until after

site-wide remedial actions were completed.

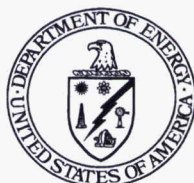
- No Operable Unit 6 document has been developed or submitted to date.
- While concurrence was reached to eliminate Operable Unit 6, the Amended Consent Agreement documents were never signed. In the fall of 2003, DOE and U.S. EPA agreed to proceed with the signature leading to the Amended Consent Agreement amendment.
- This Fact Sheet lays out the rationale for eliminating Operable Unit 6, background information on the relevant sections of the Amended Consent Agreement, and the steps that will be taken to formalize this agreement.

### RATIONALE

- The Operable Unit 5 Comprehensive Response and Risk Evaluations (CRARE) was completed subsequent to the execution of the Amended Consent Agreement and was based on all existing data at the time. The Operable Unit 5 CRARE considered post remedial site-wide conditions based on the actual selected alternatives (in the case of Operable Unit 3 the preferred alternative consisting of the on-site disposition of debris meeting OSDF waste acceptance criteria and off-site disposition for debris not meeting waste acceptance criteria) for the individual operable units (Feasibility Study Report for Operable Unit 5, Appendix H, June 1995). The conclusion of the Operable Unit 5 CRARE stated:

*"[t]he adopted site-wide remedy would not result in unacceptable health hazards or incremental lifetime cancer risks to the three target receptors (i.e., undeveloped-park user, off-property resident farm adult, and off-property resident farm child)... These findings confirm the completeness and effectiveness of the waste removal and treatment measures proposed in the site-wide remedy..."*

- No amendments to the operable unit specific remedies since the completion of the Operable Unit 5 CRARE have fundamentally changed the above conclusion.



- There are several redundant mechanisms to ensure actual post remediation residual risk levels are achieved and maintained. These mechanisms include:
  - Five year reviews required by Section 120 and 121 of CERCLA and Section XXX of the Amended Consent Agreement. The first of these reviews was completed in May 2001 with the next review scheduled for May 2006. The purpose of these reviews is to ensure the remedies remain effective. These reviews will continue indefinitely.
  - Section XI (D) of the Amended Consent Agreement contains a requirement for a Site-wide Residual Risk Assessment Report be performed upon completion of all response actions on site.
  - Section XV of the Amended Consent Agreement allows U.S. EPA to require additional response actions should they become necessary.

### BACKGROUND INFORMATION

- The Amended Consent Agreement, Section X (C), contains the requirement for a Comprehensive Site-Wide Operable Unit (Operable Unit 6).
- Conceptually, the purpose of Operable Unit 6 was to ensure that the acceptability of the selected remedies for operable units one through five would be confirmed within six-months of approval of the Operable Unit 3 Record of Decision (which was the last ROD scheduled to be signed).
- The specific change agreed upon in 1996 was to modify Section X (C) by deleting the requirements for the submission of the: Site-Wide Remedial Investigation/Projected Residual Risk Assessment Work Plan Addendum, Site-Wide Remedial Investigation/Projected Residual Risk Assessment Report, Feasibility Study, Proposed Plan, and Draft Record of Decision.
- DOE and U.S. EPA agreed that sufficient mechanisms were left in place to ensure the site-wide remedies would be protective of human health and the environment.

### NEXT STEPS

Section XXXIII of the Amended Consent Agreement allows modifications to the Amended Consent Agreement be made based on the mutual consent of DOE and U.S. EPA. Change pages will be developed and signed by the appropriate officials formalizing the elimination of Operable Unit 6.

An Interim Residual Risk Assessment will be completed to document conditions remaining at the time the FCP enters the legacy management phase. This assessment will be completed within 90 days after physical completion of the FCP (July 18, 2006 based on current forecasted completion dates)

A Final Residual Risk Assessment will be performed at the completion of all remedial actions, including groundwater remediation, and will focus on the target receptor based on the actual land use selected for the site. It is anticipated that the certification of Final Remediation Levels for Groundwater will have been attained in 2025. This final risk assessment would be performed subsequent to this certification.





**Response to Ohio EPA Comments on  
Fact Sheet – Deleting Operable Unit 6**

1. Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: General                      Page#:                      Line #:                      Code: C  
Original Specific Comment #: 1

Comment: In order for the elimination of OU6 to be acceptable some of the basic concepts and principles supported by the creation of OU6 should be committed to and timeframes for their completion defined. It is essential that a comprehensive look at land use restrictions and residual concentrations support the planned future use of the site. Considering the lack of specifics in the OU5.ROD regarding future land use and differences between projected and actual residual contamination levels, completion of a risk assessment that evaluates planned use and known residual will be very important to the community. It is important that this assessment be completed prior to releasing the site for the planned future use. Completion of this assessment will provide all parties the necessary assurance that the remediated site is fully supportive of the planned and intended future use. This information will become an essential tool in aiding the Fernald Site in becoming a productive resource for the community as a greenspace/environmental education facility.

Response: In order to respond to this comment, it is instructive to revisit the land-use objectives and cleanup level decision-making process used back in 1994-1995 to derive the Operable Unit 5 FRLs. At the time of the decision, it was clear the FCAB and other local stakeholders would not entertain a return to a residential/farming land use for the Fernald site, regardless of the success of the cleanup. They would, however, entertain non-residential/non-farming land uses as a means to return the property to productive future use. DOE accepted these recommendations and during the cleanup level development process it was agreed that a final land use would not be selected by the Operable Unit 5 ROD, but that health-protective cleanup levels would be selected that could accommodate any non-residential/non-farming land uses that may come up in the future, and still meet the CERCLA risk range of protectiveness. Thus, the undeveloped park land use scenario was adopted for planning purposes, and a  $10^{-6}$  risk level (the most stringent) was selected for this land use so that other non-farming/residential land uses that are more intensive (e.g., commercial/industrial, or a developed park) would still fall within the  $10^{-4}$  to  $10^{-6}$  risk range of acceptability for that respective land use should they be selected or switched to at some point in the future. Therefore, the undeveloped park land use at  $10^{-6}$  became the target land use for health-protective cleanup level establishment, with the recognition that non-farming/non-residential land uses could be protectively accommodated in the future based on land use pressures in the area years from now. This concept was adopted by the Legacy Management and Institutional Controls Plan (LMIC) in Section 2.1 where it limits designated land uses to those that are non-residential and non-agricultural land uses only. (The Operable Unit 5 FRLs will meet this requirement). Therefore,

2. Commenting Organization: Ohio EPA	Commentor: OFFO
Section #: Decision Summary	Page#: Bullet 2
Original Specific Comment #: 2	Line #: Code: C

Response: The bullet was a generic statement indicating contaminated material left on the site would be placed in the OSDF. The comment is appropriate however, and the bullet has been revised to indicate contaminated material and soils above FRLs would be placed in the OSDF.

Action: The bullet has been revised to read: “All contaminated debris and soils above established Final Remediation Levels remaining on site would be placed in the On-Site Disposal Facility (OSDF).”

3. Commenting Organization: Ohio EPA	Commentor: OFFO
Section #: Rationale	Page#: 2 <sup>nd</sup> para.
Original Specific Comment #: 3	Line #: Code: C

Comment: In fact there have been amendments that may well effect the conclusions of the CRARE. Specifically, the changing of the groundwater cleanup number from 20 ug/l to 30 ug/l total uranium may likely have some impact on the overall risk calculation for off-site receptors. Other changes such as OU1 remediation numbers may have



effects as well. It is not likely these changes will affect the conclusions of the assessment but indeed they most likely will effect the calculation and risk numbers.

Response: Agree.

Action: The text has been revised to read: "No amendments to the operable unit specific remedies since the completion of the Operable Unit 5 CRARE have fundamentally changed the above conclusion."

**Response to FCAB Comments on  
Fact Sheets Related to Regulatory Closeout Documents**

A letter was submitted to Mr. William Taylor of the Fernald Closure Project indicating their support for the changes reflected in both Fact Sheets made available to them for review. Their specific letter is attached. While they did support the changes proposed, the FCAB requested that DOE include language in both fact sheets to state DOE's commitment to both an interim and final risk assessment and general time frames for their completion. The FCAB specifically requested that information relative to these risk assessments be provided in the table that is attached to the Fact Sheet "Development of CERCLA Remedial Action Closeout Reports for the Fernald Closure Project"

Response: DOE is committed to performing the subject risk assessments.

The Interim Residual Risk Assessment would be completed within 90-days of the site officially entering the legacy management phase. DOE has commissioned Fluor Fernald to complete this assessment within 90-days of DOE's acceptance that Fluor Fernald has physically completed the FCP. (This is how DOE is defining the FCP entering the legacy management phase)

The Final Site-wide Residual Risk Assessment is envisioned in the September 1991 Amended Consent Agreement (Section XI(D)) and is to be performed when all remedial actions have been completed. This will require that groundwater remediation be completed and certified to meet established groundwater Final Remediation Levels. The current forecast is that this certification will occur in approximately 2025.

Action: Both fact sheets have been revised as the FCAB has suggested.